

**Abstract**

A process for producing multicoat paint systems by

- (I) applying a dual-cure primer (A) curable thermally and with actinic radiation to a substrate to give a primer film (A),
- (II) exposing the primer film (A) to actinic radiation to give a partially cured primer film (A),
- (III) applying a pigmented coating material (B) curable thermally and/or a pigmented dual-cure coating material (B) to the partially cured primer film (A) to give at least one pigmented film (B),
- (IV) exposing the dual-cure film (B) to actinic radiation to give a partially cured film (B),
- (V) applying a clearcoat material (C) curable with actinic radiation and/or a dual-cure clearcoat material (C) to the film (B) to give a clearcoat and/or a dual-cure clearcoat film (C),
- (VI) exposing the clearcoat film(s) (C) to actinic radiation to give a dual-cure clearcoat (C) and/or a partially cured clearcoat film (C), and
- (VII) subjecting the films (A), (B), and (C) to joint thermal curing when still only partially cured.